Claims

What is claimed is:

1. A compressor comprising:

a compression mechanism for sucking, compressing and discharging refrigerant;

a reservoir for storing liquid for lubricating sliding portions including the compression mechanism;

a housing for containing the compression mechanism and the reservoir; and

a refrigerant go-around passage, provided in the housing, for introducing the refrigerant discharged from the compression mechanism into the housing via a refrigerant introducing port, making the refrigerant go around an axial line of the compressor and returning the refrigerant to a discharge-port side of the housing via a refrigerant returning port, while separating the liquid from the refrigerant by centrifugation or by centrifugation and collision, wherein

a liquid returning port is provided for returning the separated liquid into the housing in a wall of a mid part of the refrigerant go-around passage in such a manner that the liquid returning port has an orientation that has a component in a direction of gravity and that is deviated from a traveling direction of the refrigerant.

2. A horizontal type compressor to be placed at an angle

or horizontally, comprising:

a compression mechanism for sucking, compressing and discharging refrigerant;

a reservoir for storing liquid for lubricating sliding portions including the compression mechanism;

a housing for containing the compression mechanism and the reservoir; and

a refrigerant go-around passage for introducing the refrigerant discharged from the compression mechanism into the housing via a refrigerant introducing port provided in an upper portion of the housing, making the refrigerant go around an axial line of the compressor and returning the refrigerant to a discharge-port side of the housing via a refrigerant returning port provided in the upper portion of the housing, while separating the liquid from the refrigerant by centrifugation or by centrifugation and collision, wherein

a liquid returning port is provided for returning the separated liquid into the housing in a wall of a mid part in a lower part of the refrigerant go-around passage in such a manner that the liquid returning port has an orientation that has a component in a direction of gravity and that is deviated from a traveling direction of the refrigerant.

3. The compressor according to claim 1 or 2, wherein the refrigerant go-around passage is arranged on the same plane.

4. The compressor according to claim 1 or 2, wherein the

refrigerant go-around passage is provided at a discharge-port side end of the housing.

5. The compressor according to claim 1 or 2, wherein the refrigerant go-around passage is constituted by a concave streak formed on a substrate attached to an end wall of the housing or to the housing and a lid for covering the concave streak.

6. The compressor according to claim 5, wherein the substrate is attached to the housing together with the lid.

7. The compressor according to claim 1 or 2, wherein each of the refrigerant introducing port, the refrigerant returning port, and the liquid returning port is provided at at least one position in the traveling direction of the refrigerant.

8. The compressor according to claim 1 or 2, wherein a guide for collecting the refrigerant to direct the collected refrigerant into the refrigerant introducing port is provided in the refrigerant introducing port.

9. The compressor according to claim 1 or 2, further comprising an electric motor for driving the compression mechanism, the electric motor being housed in the housing.